

Remarks

The Office Action dated December 13, 2004 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 14, 17-22, 24-25, and 27-32 are pending in this application. Claims 23-25 and 17-22 stand rejected. Claim 23 has been cancelled. Claims 14 and 17-22 are withdrawn from consideration.

The rejection of Claims 23-25 and 27-32 under 35 U.S.C. § 112, second paragraph, is respectfully traversed.

Claim 23 has been amended to recite "a licensed operating domain".

Claim 29 has been amended to recite "wherein the reactor comprises a core recirculation system including control components".

Claim 30 has been amended to recite "wherein the reactor comprises a core recirculation system including control components, said method".

Claim 31 has been amended to recite "wherein the reactor comprises process controls and computers".

Applicants submit that for the reasons set forth above Claims 23-25 and 27-32 are definite and particularly point out and distinctly claim the subject matter which Applicants regard as their invention, and thus meet the requirements of Section 112, second paragraph.

For the reasons set forth above, Applicants respectfully request that the Section 112, second paragraph, rejection of Claims 23-25 and 27-32 be withdrawn.

The rejection of Claim 23 under 35 U.S.C. § 102(b) as being anticipated by Bartos is respectfully traversed.

Bartos describes the process followed by Pennsylvania Power & Light Co. in uprating Units 1 and 2 of their Susquehanna Power Plant to 3441 MW thermal power from 3293 MW thermal power. This represented a 4.5% increase in thermal power. Figure 3 of the article shows the original 100% rod line and the uprate line that constrained to 100 % rated thermal power at 80% core flow. Bartos does not describe nor suggest operation of a reactor at 100 percent rated thermal power and 55 percent core flow. Bartos does not describe nor suggest operation of a reactor at 100 percent rated thermal power and 55 percent core flow. Bartos does not describe nor suggest determining an elevated load line characteristic that defines an upper boundary line of the operating domain, the upper boundary line including a first endpoint of about 120 percent rated thermal power at about 85 percent core flow and a second endpoint of about 100 percent rated thermal power at about 55 percent rated core flow.

Claim 23 recites a method for expanding a licensed operating domain of a boiling water nuclear reactor that includes the step of "providing analyses and evaluations to generate a safety analysis report" where providing analyses and evaluations to generate a safety analysis report includes the step of "determining an elevated load line characteristic that permits operation of the reactor in an upper operating region defined by an upper boundary line, the upper boundary line comprising a first endpoint of about 120 percent rated thermal power at about 85 percent core flow and a second endpoint of about 100 percent rated thermal power at about 55 percent core flow".

Bartos does not describe nor suggest a method as recited in Claim 23. Particularly, Bartos does not describe nor suggest a method that includes the step of determining an elevated load line characteristic that defines an upper boundary line of the operating domain, the upper

boundary line including a first endpoint of about 120 percent rated thermal power at about 85 percent core flow and a second endpoint of about 100 percent rated thermal power at about 55 percent rated core flow. Rather, Bartos describes uprating a nuclear reactor that is constrained to 100 percent rated thermal power at 80 percent core flow. Specifically, Bartos does not describe nor suggest an operating upper boundary line end point of 100 percent rated thermal power and 55 percent core flow. Accordingly, Applicants submit that Claim 23 is patentable over Bartos.

For the reasons set forth above, Applicants respectfully request that the Section 102(b) rejection of Claim 23

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Favorable action is respectfully solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael Tersillo", written over a horizontal line.

Michael Tersillo
Registration No. 42,180
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070